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Analysis of the immersive social content feature in the Spanish news media

María José Benítez de Gracia [CV] [10] [17] Department of Communication Studies. Carlos III University of Madrid (UC3M). mariajose.benitezgracia@alumnos.uc3m.es

Susana Herrera Damas [CV] [Department of Communication Studies. Carlos III University of Madrid (UC3M). dherrera@hum.uc3m.es

Elvira Benítez de Gracia [10] [17] Departmento of Health Sciences. Alfonso X el Sabio University (UAX). eben@uax.es

Abstracts

Introduction. This paper delves into the immersive feature covering social issues, a content that can be observed back in the very beginnings of immersive journalism. **Methodology**. To do so, we have carried out a content analysis based on an exhaustive review of the topic and a viewing of more than 1,000 pieces of this kind. The corpus is made up of 347 features published by the Spanish journalistic media during the last three years (2015-2017). **Results.** The features covering social issues represent a small percentage of the whole sample. The comparative study on the use of several immersive techniques does not show significant differences between these features and others covering different issues. **Conclusions.** Although 360° video technology offers great potential to connect the viewer with wrongful realities and thus raise awareness about its significance, it seems appropriate to continue doing research on the psychological impact of the several narrative techniques, in order to take full advantage of this huge potential.

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Keywords

Immersive journalism; feature; 360° video; presence; empathy; social issues in journalism.

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1. Introduction

Over the last three years, immersive journalism with 360° video has led to rise of new forms of journalistic production that, thanks to the combination of a series of technologies, brings the viewer closer to the facts so that he/she are able to "obtain experiences in first person of the events or situations described in them [...], which offers a profoundly different way to experience the news", and therefore understand the information in a way that has been impossible so far (De la Peña et al., 2010: 291-301).

With the use of a vision system based on stereoscopy (commonly, virtual reality glasses) and the recreation of a three-dimensional-shaped spherical stage obtained by recording video in 360° (Lelyveld, 2015; Doyle et al., 2016; Sirkkunen et al., 2016; Hardee and McMahan, 2017: 7), these productions break the barrier that separates the physical from the virtual world (Domínguez, 2013: 105). Which allows the viewer to move through a scenario in which there is no limit regarding the traditional frame (Watson, 2017: 22, Marconi and Nakagawa, 2017: 3). The peculiarity here is that, although the viewer knows and is aware that it is represented reality, he reacts to it as if he was there.

This concept was first applied in different areas such as the medical, educational, real estate, tourism, or advertising (Clark, 2015). Transferred to journalism, it grants the ability to create in the audience the feeling of actually being in places and events of journalistic interest, in the distance (Biocca and Levy, 1995: 138), which offers the "possibility of experiencing the feeling to be in the scenario in which the news take place" (Pavlik, 2005: 41), and provides an increased awareness of "being there, and taking advantage of previously unavailable spatial points of view in another type of visual narration" (Van Der Haak, et al., 2012: 2932). For Dominguez, immersive experiences are centered around the sensory perception of a situation to pursue the same thing: "to increase the understanding and the sensitivity towards the reality. The fundamental idea is that human knowledge increases when a first-person experience is available" (Domínguez, 2013: 293).

Immersive journalism is born with the aim of establishing a more direct and close relationship between the viewer and the event. Quoting De la Peña: "the participant becomes a part of the story, either as oneself or through the perspective of a character". In any case, the viewer achieves unprecedented access to images and sounds, and "possibly, the feelings and emotions that come with the news" (De la Peña et al., 2010: 192). At the same time, this greater understanding and approach to the reality that is being represented is considered by some authors as something fundamental to promote empathy,

that becomes a rhetorical element associated with this type of content almost from the appearance of first publications (De la Peña, 2015, Milk, 2015 and Roberston, 2017).

Driven by this idea, immersive journalism has frequently focused on showing social issues so that the viewer can perceive the reality represented with a greater degree of sensitivity and understanding (Ibánez Castejón, 2017) and also with a clear purpose to complaint. Before analyzing the immersive features of social content produced by the Spanish press, we proceed to present its foundations, and outline some brief notes about the origin of this type of productions from an international perspective.

1.1. Origin and evolution of immersive journalism with social content

According to the Real Academia de la Lengua, the concept of immersion refers to the idea of "being immersed in something". This thought has already been used metaphorically in other narratives such as literature and cinema to explain the cognitive process of the reader or the viewer that is immersed in other worlds that are given to him through a novel or a film, respectively (Gerrig, 1993: 10; Green & Brock, 2000: 701).

In the history of journalism, two moments can be identified that underline this idea of immersion in a reality represented through the media. First, the "fictionalized feature" is a narrative technique that emerged at the beginning of the 18th century and spreads during the 19th century. This means: "on the one hand, a symbiosis between the testimonial vocation and the documentation procedures are proper to journalistic reporting, on the other, the representation conventions inherent in the realistic fiction novel" (Chillón, 1999: 193).

Along with these kind of features, at the beginning of the 20th century, the muckrackers appeared in the USA. The *muckrakers*, a group of journalists and writers focused on studying our society in order to report situations of corruption (Campos, 2015). Inspired by some of their techniques, in the 60s the New Journalism appears, whose most representative authors are Truman Capote or Tom Wolfe. The latter defines the New Journalism as "a label that ended up hitting at a time when there was a certain artistic agitation in journalism, a fact that was new in itself" (Wolfe, 2012: 38). At the most radical end of this movement is the so-called *gonzo* journalism, whose head representative is Hunter S. Thompson who delves into the narrated stories to the point of becoming a partner and becoming another character (Chillón, 1999: 230) who is called "Dr. Gonzo" (Thompson, 2002: 32).

In this way, we find parallelism between the current immersive journalism and its way of delving into a topic attempting for greater accuracy when documenting it. However, the main difference is that in immersive journalism it is the viewer himself - instead of the journalist - who accesses the event, becoming a witness as the first person or even as the main character (De la Peña et al., 2010: 292).

Taking into consideration this peculiarity, the concept of immersive journalism seems to be linked to the journalist and researcher Nonny De la Peña who, accompanied by with her team "The Emblematic", publishes different projects focused on human rights issues. In 2007 she presents "Gone Gitmo", her first immersive journalism project (Weil and De la Peña, 2008), where she uses computergenerated graphics to recreate a virtual Guantanamo prison. This first project is part of what the author considers interactive journalism or low immersive journalism, since it can be visualized with a certain

level of choice: selecting actions or accessing photographs, documents and audiovisual material (De la Peña, et al., 2010: 291).

In 2009 De la Peña presents the project "The Ipsress experience", which reconstructs the interrogation of detainee 063, Mohammed al-Qahtani, hooded and then imprisoned in November 2002 in Guantanamo Bay prison (De la Peña et al., 2009). "Hunger in Los Angeles" is one of the key items in the evolution of immersive journalism, thanks to the dissemination it reaches, and the positive feedback it receives in the international context. It is a project presented in 2012 at the Sundance Film Festival. The piece recreates the diabetic crisis of a person while waiting in a food bank queue. The perception of recreation is so realistic that, when accessing the scene, the viewer walks and interacts like the rest of the characters, avoiding the space in which the patient is staying to prevent stepping on him, even knowing that he is inside a recreation (De la Peña, 2015). This is shown in Figure 1:

Figure 1: Frame from "Hunger in Los Ángeles"





Source: www.immersivejournalism

At the World Economic Forum request, the "Syria" project, published in 2014, narrates the effects on children of this country war and includes audio, video and real photographs. All these projects are framed within a second level of immersive journalism that De la Peña calls deep immersive journalism, since they transfer to the viewer the feeling of being in a place where they are producing a credible action, through a team based on virtual reality technology, (De la Peña *et al.*, 2010: 299).

Along with the De la Peña works, other journalistic media begin to produce similar projects. On April 27, 2016 The Guardian publishes "6x9: a virtual experience of solitary confinement" to denounce the psychological damage that this type of punishment can cause on prisoners. The viewer experiences in first person what it means to be in an isolation cell of a prison in the US, with its same characteristics and dimensions, and can even hear real voices and sounds.

Parallel to these environments created by computer graphics, the evolution experienced by 360° video technology combined with the use of low-cost stereoscopic glasses - such as Google Cardboard¹, Google Daydream², Samsung Gear VR³ and, more recently, the Oculus Go system⁴- makes, this technology the most common way to create content based on immersive journalism in practice (Hardee and McMahan, 2017: 2).

Two of the pioneering works in this sense are: "Haiti 360°", published in 2010 by CNN to show the effects of the hurricane that devastated its population that year; and "Condition one", in 2011, by journalist Danfung Dennis, which shows a shooting range in Libya. It is in 2015 when different media start publishing projects in this new format.

Among those projects that address social issues, we highlight "The displaced", published in October 2015 by The New York Times, which narrates the harsh conditions that children displaced from their homes face during wars. In the following months, other media are added to this type of publications. The Associated Press, in collaboration with producer Ryot, publishes "Seeking home: life inside the Calais migrant camp", focused on the precarious situation in which life goes for refugees and immigrants from the Calais camp in France. The video merges plans of the place with interviews to its characters and daily situations, as can be seen in figure 2.

Figure 2: Frame from "Seeking home: life inside the Calais migrant camp"



Source: YouTube

There are several projects carried out by producers specializing in this type of content. In December, Ryot and the newspaper The Huffington Post produced a documentary series composed of eight video

pieces entitled "The crossing" that narrates the arrival of Syrian refugees to the Greek coasts. From Within, a producer created in 2014 by director and photographer Chris Milk, we highlighted "Clouds over Sidra", made for the United Nations in January 2016. The project uses the first-person story of Sidra, a twelve-year-old girl who narrates the living conditions in the Zaatari refugee camp in Jordan.

In Spain we also have this same interest in exploring social issues with a denunciation purpose. In April 2016, *El País* published its first piece "*Fukushima*, *vidas contaminadas*", focused on the accident that occurred in the nuclear power plant of this Japanese town. The work is based on an idea from Greenpeace that finances the trip in order to disprove the official version on pollution levels and show the real impact of the accident on the population. The piece presents different scenarios and gathers testimonies from those affected, as shown in Figure 3:

Figure 3: Frame from "Fukushima, vidas contaminadas"



Source: El País VR

Later on, this same newspaper publishes "¿Quiénes son los cascos blancos sirios?" a production recorded in Syria on the peace work carried out by this organization in the streets of Aleppo. "Ayotzinapa, la tumba abierta" narrates the disappearance of 43 students in the rural school of Ayotzinapa, in Mexico, while "Slums en Dhaka" shows the conditions of the workers of the textile industry in Dhaka, Bangladesh.

We find another example in "En la piel de un refugiado", published on April 18, 2016 by El Confidencial and produced by the 93 Metros production company for UNHCR as part of a campaign to raise awareness about the war in Syria and the conditions suffered by the refugees. The documentary shows the escape of a Turkish refugee after the bombing of the area where he lived.

We also place here several of the projects developed within the framework of the "Immersive Journalism Lab", an initiative of the The App Date group carried out between January and February 2016 to make this format known among the main journalistic media in Spain. The experience included the participation of 21 journalists from 11 of the main media -RTVE, El País, El Mundo, La Sexta, eldiario.es, Abc, Cuatro, Yorokobu, Cadena Ser, Vocento and Diario Sport-. We highlight the piece "Esto es Madrid", which faces two contrasting socio-economic realities: the shanty town of "El gallinero", on the one hand, and the wealthy Salamanca district of the capital, on the other. Subsequently, and through the VReak platform designed to promote immersive journalism in Spain, this group has continued to publish several projects equally focused on social issues. Among them, it is worth highlighting "Empatía", in March of 2016, which narrates the experience of children who have undergone an organ transplant and "Ni paso, ni me paso", in June 2016, which reports the human cost of school bullying.

1.2. Presence, empathy and interaction in 360° immersive video feature

In this context we situate the 360° immersive video feature, which we define as a:

"Model of reality representation that narrates and describes facts and actions of interest to provoke in the viewer, the illusion of being present in the event in the first-hand perspective, from which the viewer can better understand the circumstances, identify himself with the characters and even experience the emotions that come with the reality that is being represented" (Benítez y Herrera, 2017: 198).

As we have been saying, one of the main hallmarks of immersive reporting is the viewer's response to the events represented way as if he were really there.

Sánchez-Vives and Slater refer to this idea under the concept of presence, understood as "the illusion of being inside the virtual environment indicated by the way of responding to it as if it were real" (Sánchez-Vives & Slater, 2005: 333; Slater, et al., 2009: 200). Unlike other authors who use the terms presence and immersion as synonyms (Witmer & Singer, 1998, McMahan, 2003; Brown & Cairns, 2004), for Sánchez-Vives and Slater "presence" corresponds to a perceptual experience, while "immersion" corresponds to the ownership of a system that can be measured through objective parameters and regardless of the human experience it provides (Sánchez-Vives & Slater, 2005; Slater, et al., 2009: 195).

According to De la Peña, presence in immersive journalism is built on three conditions (2010: 294):

- 1. The "plausibility illusion". That is, the likelihood of the environment being shown that leads to the feeling that it is real and is considered as such by the viewer
- 2. The "place illusion". Understood as the viewers' illusion of being and acting in the place, despite knowing he is not there
- 3. The property of the virtual body, meaning the viewer sensation of ownership towards the virtual body (avatar) represented in the narration

As we pointed out in the introduction, one of the first authors to link the concept of empathy with this type of reportage has been the film director Chris Milk. During the presentation of the work "Clouds over Sidra" in 2015, he pointed out the existence of a relationship created by the proximity that is created between the viewer and the event that allows the first "to feel the humanity of the characters in the narrative and empathize with them in a deeper way". In his words:

"It can change people's opinions of each other, so it has the potential to actually change the world. It is a machine through which we have become more compassionated, more empathetic, more connected and ultimately we have become more human "(Milk, 2015).

In order to define the concept of empathy, Igartua and Paez distinguish two dimensions: emotional and cognitive. "Emotional" refers to "the ability to feel what the protagonists feel, to be involved emotionally, to experience the same feelings that the characters experience". "Cognitive" refers to the fact of "understanding, comprehending or putting oneself in the place of the protagonists, perspective-taking, which is related to the ability to take the perspective or adopt the point of the other" (Igartua & Paez, 1998: 424).

Although the ability of this type of feature to generate empathy is often pointed out, the truth is that up until now there has been no research that empirically supports this idea. Professor Sam Gregory, from Harvard University, warns of the overreaching of the term since he maintains that "it is not an automatic empathy machine but a tool that can contribute to a better understanding of the experience of the other person" (Gregory, 2016). To get to this statement, Gregory distinguishes empathy from other values, such as compassion and solidarity, which he considers the true narrative challenges since, in addition to putting oneself in the place of the other, "they involve taking a reasoned action in the interest of another person".

Analyzing the connection between the feeling of presence and the generation of empathy in the 360° immersive video feature through a reception analysis exceeds the possibilities of this article. However, some recent studies (Hill, 2016; Fisher, 2017; Shin & Biocca, 2017; Archer & Finger, 2018) have come to the conclusion that certain narrative techniques allow a greater approach of the viewer towards story, which contributes to the understanding of the reality represented and helps the viewer to get closer to the context of the characters.

Recently, Nash (2018) examines the narrative resources that contribute to generate a close relationship between the viewer and the protagonists and those with whom this balance is broken. He does so by analyzing four journalistic pieces produced by the UN and with a social theme that focuses on the human dramas that are experienced in different situations and places on the planet. In his conclusions he emphasizes the importance that the social presence acquires so that the viewer has the sense of being in the represented environment. This author detects different resources with what, considers, and generates social presence:

- When the viewer's point of view is located at the level of his eyes or just above it;
- When something is offered to the viewer as if it were part of the narrative;

- When the character and the viewer position themselves as if they were sitting together on the floor, simulating a face-to-face encounter and inviting the viewer to listen as a witness (Nash, 2018: 126).

From these techniques, we consider that, in the 360° immersive video feature, the conditions that contribute to bring the viewer closer to the represented reality are:

- 1. Use of primary internal focus through the use of the subjective camera. This type of focalization transmits the viewer the illusion of being present in the event since he can see through the eyes of the represented character. On the contrary, the internal secondary focus introduces a greater distance as far as the viewer approaches the character, from his own perspective, seeing him. Zero focus maximizes distancing since it offers an external view of the characters (Domínguez, 2013: 183).
- 2. Placing the camera at the height of the viewer's gaze. Following Dominguez (2013: 158), the representation will be more immersive the more the narrator's visual perspective merges with that of the observer. In this sense a zenithal, isometric or lateral perspective reiterates the distance
- 3. Representation of the viewer through an avatar, either completely or showing some part of the body (arms, hands, legs, etc.). When the viewer is offered a representation of his virtual body within the represented environment, he acquires the sensation of ownership for the virtual body (avatar). Several authors (Botvinick & Cohen, 1998: 756; Weil & De la Peña, 2008; Slater, et al., 2010: 1; Slater, et al., 2013; Banakou; Groten & Slater, 2013; Kokkinara & Slater, 2014) agree that the physical representation of the viewer within the virtual environment contributes to a greater sense of presence.

Along with these techniques, the viewer can have a certain level of interactivity that allows him to relate to the environment (Gifreu, 2013: 314). Although 360° video technology has limitations that prevent immersive reporting from giving an accurate degree of interaction -like the one we find, for example, in videogames-, Heeter's classification (1992: 262) makes it possible to differentiate three types of interaction: personal, social and environmental.

Depending on the personal interaction, the viewer can access reality represented in 4 ways (Ryan, 2005; De la Peña et al., 2010: 292; Dolan & Parets, 2015):

- 1) Passive observer: the viewer is outside the narration and adopts different perspectives that distance him from the story. All his actions are exploration; none affect the predetermined story or the order of the presentation.
- 2) Active observer: the viewer continues to maintain his exploratory role outside the narrative, but he can observe it in a closer way, through his own perspective.

- 3) Passive participant: the viewer coexists in the narration by acquiring the role of a character. His action progresses through a structured story with certain freedom of simulated exploration and interaction.
- 4) Active participant: the viewer coexists within the narrative and the story is created in real time, partly by the user and partly by the system.

Social interaction is understood as the possibility of interacting with the characters within the story through looks, gestures or voices. This occurs when, for example, the characters recognize the viewer as a personage integrated into the narrative.

Finally, environmental interaction refers to the way in which the virtual environment seems to recognize that the subject is actually there and is able to react to it. From Heeter (1992), we deduce that when the environment recognizes that the subject is there, the subject, in turn, believes that he is really within the environment.

Although, as we have determined, the technical limitations prevent a real environment / viewer interaction, the use of two resources can contribute to improve this relationship. In the first place, when the camera is located at the height of the viewer's gaze and is combined with certain movements, it may provide the feeling that he advances or moves within the represented scene in a way much like reality. Secondly, environmental interaction can also be obtained through resources that direct the viewer's attention towards a specific point of the represented action. When the viewer receives this type of stimuli it is easier for him to perceive that he is within the story itself and, therefore, achieve a greater understanding and connection to the reality that is being represented.

2. Methodology

To analyze the use that Spanish media make of the immersive social content feature and find out to how it uses narrative techniques that emphasize presence, we propose the following two questions research:

- 1st) What portion do social contents occupy in the Spanish 360° video immersive production?
- 2nd) How do social-based immersive features use the different narrative techniques that contribute to generate a greater sense of presence?

In order to answer these questions, and in the absence of measurement instruments, we have designed our own model⁷.

2.1. Design of a model

Our methodology has been based on the design of a content analysis since, in addition to establishing the research method par excellence in Communication (Igartua, 2006: 181), this technique allows "to provide knowledge, new insights, a representation of the facts and a practical guide for action" (Krippendorff, 1990: 28).

Our guide is divided into two main blocks. The first refers to the basic journalistic characteristics that define the 360° immersive video feature (media that publishes it, year of publication, duration, distribution platform, app used for its distribution, theme, main purpose and scope of the information). The second block includes the different immersive narrative techniques that contribute to generating the sense of presence to which we have been referring. Table 1 summarizes the variables and categories that have served to drive this second issue.

Table 1: Variables and categories for presence analysis

	Viewer's point of view					
	Zero focus					
	Primary internal focus					
Focus	Secondary internal focus					
	Several focus combined					
	Bird's-Eye View					
	Hight eye level					
Camera placement	Low eye level					
	Eye level					
	Over eye's level (until 50 cm)					
	No representation					
Viewer's representation	Partial representation					
	Full representation					
Vi	Viewer's interaction and participation					
B 11. (1. (1.)	Viewer as a active observer					
Personal interaction (role)	Viewer as a passive observer					
	Viewer as a passive participant					
Social interaction	Through the look					
Social interaction	Through gestures Through the voice					
	Travel in a vehicle					
	Stay still					
Environment interaction	Walk					
Environment interaction	Crouch					
	Drive					
	Objects with movement					
	Brightness					
	Colour emphasis					
	Blur					
Expressive visual effects	Sound					
	Narrator's voice					
	Character's voice					
	Graphic elements					
	C					

Source: own

2.2. Sample

In our study, the analysis unit is constituted by the 360° immersive video feature. Since this definition could lead to errors, we established the following criteria:

- 1. Within the basic features, we stated that our sample should be composed of features based on real facts and current events (Cebrián Herreros, 1992: 149), this attempts to bring the viewer closer to these events (Gomis, 2008: 158), and that focus on human interest issues (Martínez Albertos, 2000: 318).
- 2. Within the characteristics of the 360° immersive video, we select those created from real images -excluding the ones entirely generated from computer graphics-, and that offer the user control of the point of view. We therefore discard the filmed in 360° but that do not grant this type of control.

To obtain the sample, we considered a three-year time gap from January 1st 2015, the year in which these features began to be published more regularly, up until December 31st 2017. For the selection of media, we have referred to the published list in the *Agenda de la Comunicación 2017*, published by the Secretary of State for Communication. This official document has allowed us to filter among the many websites and blogs that are currently published on the Internet and also exclude others focused on specialized topics such as *National Geographic* or *Marca*. We continued from two criteria:

- Spanish media within the categories of written press, digital newspapers, radios and digital televisions of general information, that publish in Spanish and that have a video channel on YouTube and/or Facebook.
- Foreign media based on Spain and, as in the previous case, have a video channel on YouTube and / or Facebook and publish their contents in Spanish

From the first list, we accessed the respective channels of these media on YouTube, Facebook and their own website, we then used a series of search⁴ terms to check if they had published any content that could be considered for analysis.

The *corpus* has been integrated by a total of 347 pieces published by 23 Spanish media. Among the national ones we find, *RTVE*, *El País*, *El Confidencial*, *El Español*, *La Sexta*, *La Vanguardia*, *Infolibre*, *El Independiente*, *El diario.es*, *Antena 3* and *MegaStar FM*. We added *Diario Sur*, *Diario de Navarra*, *El Diario montañés*, *Diario de Sevilla*, *Faro de Vigo*, *Canal Extremadura y Castilla La Mancha Media*, of regional / local character. Among the foreing media based in Spain, we found *BBC*, *Huffpost*, *The New York Times*, *RT* (before *Rusia Today*) and *Euronews*. For space reasons, in the next section we will delve into the results related to the immersive social-content features. To know more on the details of the sample as a whole, Benítez and Herrera (2018 and 2019) can be consulted.

3. Results

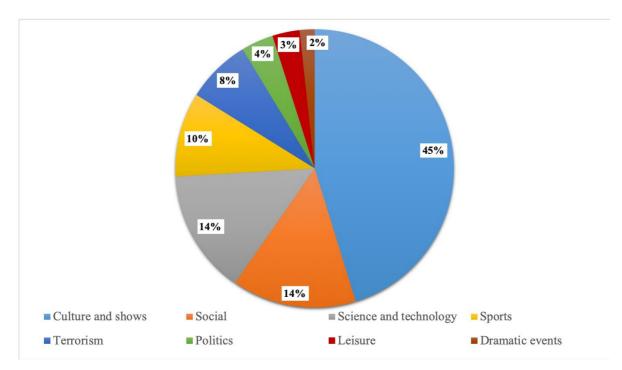
Once the sample was coded from a nominal quantification system, we performed a pre-test/post-test in order to verify that the coding criteria were not discrepant and the measurements were reliable (Wimmer & Dominick, 1996: 184). To do this, we checked the reliability of 20% of the sample using Cronbach's alpha coefficient on the two blocks of data obtained in two coding made at different times. In the measurements of each of the items, the reliability indexes were very high (between 0.74 and

0.99), which allowed us to continue with our study. After that, we exported the data from Excel to SPSS software (version 24.0) for processing.

We now present the results from the two research questions that have guided this work. Firstly, we will see what portion social issues occupy in the set of the 360° video immersive features produced by the Spanish media. Afterwards, we will complete this first portrait with the analysis of how the immersive social-type reports use the different narrative techniques to generate a greater sense of presence in the viewer. For this we have carried out a comparison with what happens in immersive features that address other types of topics.

3.1. Rare presence of the immersive social content features

The results show that, of the total of 24 analyzed media, 11 of them publish, at least, one piece of social content. In total there are 50 features of this type which is 14.4% of the total sample. As it can be seen in graph 1, that includes the distribution by topics of the 347 analyzed features.



Graph 1: Topics covered in 360° immersive video features by Spanish media (in%)

Source: own

In 88% of the cases the duration of the features focused on social issues is less than five minutes while in the remaining 12% they last between 5 and 10 minutes. 48% were published in 2016 and 52% in 2017.

In a more detailed analysis, we find that 28% of the pieces address manifestations or protests, 18% work-related issues, 12% religious issues, 12% portraits linked to poverty, 10% the situation of

refugees, 6% the food industry, 4% issues related to immigration, 4% health, 4% issues related to justice and 2% education.

Table 2: Immersive features of social content in the Spanish media

Regarding the pursued purpose by these features we find that 42% is oriented to show a situation in context, 26% to feature an issue and 10% to deepen a specific fact. We summarize these results in table 2. Table 2: Immersive features of social content in the Spanish media Title	Media	Date	Social content	Total 360° immersiv e video features	Total 360° immersi ve video features with social content	
Evanna Lynch descubre la cruda realidad de la industria láctea en 360		2017	Food industry			
Un día de patrulla en la frontera entre Estados Unidos y México			Job			
Lo que hay detrás del "Made in Bangladesh"	•		Job	35 pieces		
Así es la vida en los barrios más pobres	El País		Poverty		8 pieces	
de Dacca El teleférico que llega a los barrios			Poverty			
pobres de Ecatepec		2016	Justice			
Los desplazados que ya perdonaron		2010	Health			
A walk through dementia	El	2016	Refugees	1 pieces	1 pieces	
En la piel de un refugiado	Confidencial		Ü	-		
Esto es Madrid	La Sexta	2016	Poverty	1 pieces	1 pieces	
La Vanguardia.com en 360°	La Vanguardia	2016	Job	2 pieces	1 pieces	
#RefugioPorDerecho	Infolibre	2016	Refugees	2 pieces	2 pieces	
Marchas de la Dignidad #28M			Protest			
Una "manada feminista" atraviesa Madrid		2017	Protest		3 pieces	
360º llenos de orgullo	eldiario.es	2016	Protest	4 pieces		
15M, 5 años después en Sol (360°)		2010	Protest			
Ni paso, ni me paso	MegaStarFM	2016	Education	1 pieces	1 pieces	
Quedada "Pokémon GO"	HuffPost	2016	Protest	4	2 nigas	
Galerías IV, La Cárcel. Segovia centro de creación			Justice	4 pieces	2 pieces	
Bautismo a la rusa en 360°: creyentes ortodoxos se sumergen en agua helada		2017	Religion		17 pieces	
La Hora del Planeta en 360°: Moscú apaga sus luces y se une al "flash mob" mundial			Protest			
La Pascua en 360°: Celebraciones de la fiesta cristiana en Moscú	RT (Spanish)		Religion	123 pieces		
Protesta de Femen en París en 360°			Protest			
Protesta de Penien en Faris en 300 Protesta de París en 360°: Los inmigrantes chinos denuncia la brutalidad de la Policía francesa			Protest			

RT en 360° le invita a la mayor catedral			Religion			
de Rusia a ver la misa navideña ortodoxa						
Bomberos encienden una protesta contra la austeridad en Francia			Protest			
Piedras y gas lacrimógeno en las						
protestas contra la reforma laboral en			Protest			
Francia						
Ciclistas llevan a las calles de Hamburgo			Protest			
su descontento por el G20			Tiotest			
El peligroso viaje de dos niñas en el			Poverty			
Himalaya para llegar a la escuela La protesta en París en 360°: Una			Ť			
marcha contra la brutalidad policial			Protest			
sacude la capital de Francia			Trotest			
Simulacro de rescate de la brigada de			т 1			
emergencia y la aviación rusa			Job			
Desde el corazón de las protestas en París			Protest			
contra la reforma laboral			220000			
Desmantelan "La Jungla" y trasladan a los refugiados		2016	Refugees			
Manifestación en París a favor de los						
inmigrantes y contra el "racismo			Protest	Protest		
institucional"						
Así se entrena la Unidad Especial de			Job			
Respuesta Rápida rusa			300			
Misa de Pascua en la catedral de Cristo			Religion			
Salvador de Moscú	BBC					
La última fábrica de kufiyas	(Spanish)	2016	Job	6 pieces	1 pieces	
360° en Brive: encontrar trabajo gracias	(# F)		Tob	_	•	
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360° en Brive: encontrar trabajo gracias a Facebook Alessio, un italiano afincado en Francia,	(dp.m.s.r)				•	
360° en Brive: encontrar trabajo gracias a Facebook Alessio, un italiano afincado en Francia, exige el derecho al voto en las			Job Job			
360° en Brive: encontrar trabajo gracias a Facebook Alessio, un italiano afincado en Francia, exige el derecho al voto en las presidenciales					·	
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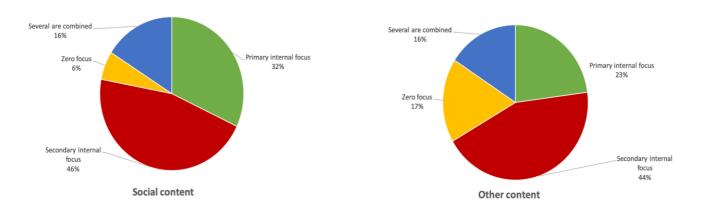
Source: own

3.2. Predominance of secundary internal focus

Regarding the type of focus, it is secondary in 44.1% of the 347 analyzed features, while the use of primary internal focus is reduced to 23%. Note that the primary focus, generates a greater sense of presence in the viewer. This illusion decreases with the use of secondary focus thanks to which the viewer observes the action through the eyes of a represented character, but, at the same time, the character also sees him. It decreases even more with the use of zero focus, which represents the highest degree of distancing and which we find in 15.9% of the sample. In the rest of the cases, several focus are combined.

The comparative analysis shows that secondary internal focus can be found in 46% of the features of a social issues. In 32% there is a primary internal focus, and only 6% of the features use zero focus. 16% combines several focalizations at the same time. In the pieces that address other topics we find secondary internal focus in 43.8%, followed by primary internal focus (22.9%).

Graph 2: Focus comparative analysis



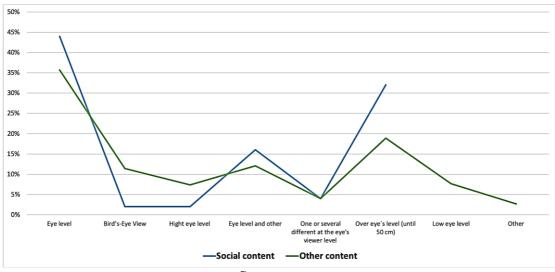
Source: own

3.3. The height of the camera approaches to the viewer's eye

In 36.9% of the whole sample, the camera's height meets the viewer's eye level. In 20.7% the camera is elevated to a height of less than 50 centimeters in comparison to viewer's gaze. Both data represent 57.6% of the cases, which implies a greater distance approach in more than half of the analyzed features.

The comparative analysis shows that this trend is very similar. However, social media features more often place the camera at the level of the viewer's eyes. The percentage is 44% compared to 35.7% which we find in features that deal with other issues. This can be seen in graph 3:

Graph 3: Comparative analysis of the camera's placement



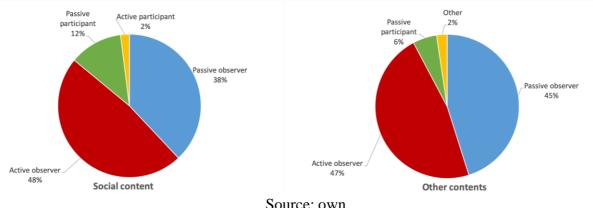
Source: own

3.4. The viewer is represented as an observer who does not participate

When analyzing the role of the viewer within the immersive features of social issues, we verify that in 91.4% of the cases analyzed the viewer appears as an observer. Within this role, we find more the active modality (47.3%) than the passive one (44.1%). This data sharply contrasts with 6.6% of the occasions in which he appears as a participant. We have found only one case in which there is an active participation, although this is simulated, given the technological limitations of this type of recordings. In total there are 23 features in which the viewer acquires the role of participant, although the number of media that recourse to this type of interaction is reduced to 7. In 2% the roles are not well defined, for they are mixed together.

The comparative study reflects this same tendency. Both the immersive features of social content and the rest usually represent the viewer as an active observer. We found this representation in 48% of the social features, a very similar percentage to the one we noticed in other features:

Graph 4: Comparative analysis of the viewer's role



Source: own

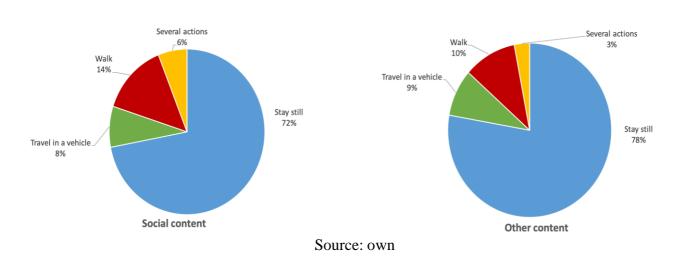
3.5. The viewer's interaction in the event is low

We only found social interaction in 1.2% of the sample. We highlight the feature "En la piel de un refugiado", published by El Confidencial. Although there is no real interaction between the characters, the viewer is offered the possibility of interpreting the story as if it were indeed interacting. With this purpose, the character turns to the viewer and apprehends him in a direct way: a companion tells him to run away from the room they are bombing, a child asks him to play, a volunteer to follow him... etc.

Regarding environmental interaction, we detect two types of camera movements that can contribute to viewer's moving sensation/illusion within it. The most frequent is to simulate their movement when walking, something that we find in 11% of the total sample. The second most frequent is to travel with a transport media, something that occurs in 8.6% of the cases analyzed. However, in most of the works the camera is anchored on a fixed support (76.9%), so that the viewer's gaze is held in a static point, which conveys the idea of standing.

The comparative analysis reflects similar percentages although the environmental interaction is somewhat greater in the features that address issues other than social ones. This can be seen in graph 5:

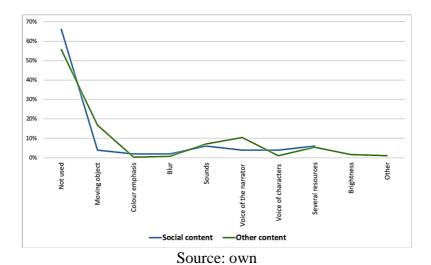
Graph 5: Comparative analysis of the spectator's interaction



Regarding the use of resources that try to direct the viewer's attention to a point in the action, the results indicate that they are not used in 57.1% of the total sample. In 15% mobile objects are used. In 9.5% it is the voice of the narrator that indicates to which side he should direct his gaze. At a lower 1.4% this function falls on the voice of a character. The sound effects with this same purpose are used in 6.9% of the sample.

In the comparative analysis we found that the use of these techniques is less common in social issues features. In the few occasions in which they appear, what we notice are sounds (in 6%), voice of the narrator (4%), voice of characters (4%) and moving objects (4%). The rest of the features use more mobile objects (in 16.8% of the occasions), the voice of a narrator (in 10.4%) and sounds (7.1%):

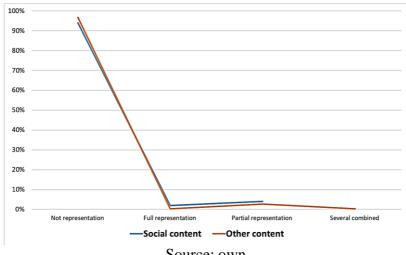
Graph 6: Comparative analysis of the use of different resources that help direct the viewer's attention



3.6. The viewer's physical body is hardly represented

In 96.3% of the analyzed features, the viewer is not represented. In the cases in which it does appear, this representation is partial in 2.9% of the total sample and complete in 0,6%. The comparative analysis does not reflect large differences between social issues in immersive feature and those that address different issues, as can be seen in graph 7.

Graph 7: Comparative analysis of the degree of viewer's representation



Source: own

4. Conclusions

The 360° immersive video feature offers a first person visual perspective that brings the viewer closer to the narrated event as if he were there. The use of a stereoscopic vision system combined with images recorded in 360° video eliminates the barrier imposed by the screen or the role of conventional media. Through a spherical scenario in which there is no limitation of traditional framing, the viewer accesses the representation of a reality in an environment of great visual and sound richness, something that allows him to get closer to the circumstances and characters of the narrated events.

In a context of information saturation which requires the constant search for new ways to link and awaken the interest of the audience, this peculiarity - never achieved in journalism before- can mean a remarkable qualitative leap when it comes to denouncing and showing wrongful social realities.

As we have seen, this social vocation is not unfamiliar to the 360° feature but it is already present from the beginning of immersive journalism as reflected in the first works carried out in the USA by Nonny De la Peña and her team. In Spain, the media have also been permeable to this new technology since, between 2015 and 2017, they have published 347 features. However, only 14.4% of them deal with social issues, compared to the 45% majority that deals with issues related to culture and entertainment.

Regarding the comparative use of the different narrative techniques that can generate in the viewer a greater sense of presence, the differences barely distinguish the social issues immersive features. The results found each case are either practically the same, or with some difference that we consider more related to the experimental nature and lack of previous knowledge when producing this type of content than to a deliberate attempt to achieve this greater approach in the case of features that address social contents of human interest.

However, some indicators are positive such as the use of primary internal focus (in 32% of total features of social content compared to 23% in other features), as well as the placement of the camera's height either at the viewer's eye (in 44% of social features) or to a height lower than 50 centimeters.

In any case, it seems important to continue deepening the greater or lesser psychological impact of the different narrative techniques in terms of presence and empathy. This will allow us to take advantage of the great potential offered by this technology to bring the audience closer to marginalized, wrongful and forgotten social realities. Perhaps this potential in turn helps to awaken consciences with the consequent change of an attitude that may favor their transformation.

Dates:

start of the investigation: November 2017end of investigation: November 2018

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